OFFINAL

# FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	AUG 1 2 1996
Advanced Television Systems and Their Impact Upon	) MM Docket No. 87-268
Existing Television Broadcast Service	DOCKET FILE COPY ORIGINAL

# REPLY COMMENTS OF ECHELON CORPORATION

Echelon Corporation ("Echelon"), by its attorneys, respectfully submits these reply comments in connection with the Commission's Fifth Further Notice of Proposed Rulemaking ("Further Notice") in the captioned proceeding regarding adoption of a mandatory standard for Digital Television ("DTV") services.<sup>1</sup>

#### **INTRODUCTION & SUMMARY**

Echelon is a high-technology company developing intelligent, distributed control networking systems for applications ranging from home automation and commercial HVAC control to electric utility demand-side management.<sup>2</sup> As a prime example of the rapid pace of technological innovation arising out of the United States computer industry, Echelon has a strong interest in ensuring that government's role in standards-setting is appropriately limited and that mandatory government standards are both minimally intrusive and competitively neutral.

No. of Copies rcc'd O+ Copies ABCDE

Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Fifth Further Notice of Proposed Rulemaking, FCC 96-207, MM Docket No. 87-268 (released May 20, 1996).
 HVAC is the acronym for "heating, ventilating and air conditioning," a complex and costly system for commercial buildings.

The "Grand Alliance" ATV standard proposed by the Advanced Television Systems Committee ("ATSC") violates these basic principles by determining technological choices for the emerging digital video market by regulatory fiat, rather than through marketplace rivalry. It advances the commercial interests of the manufacturers of television receivers—represented by the Electronics Industries Association ("EIA")—while forcing computer and software manufacturers to bear virtually all of the costs of ensuring compatibility between TVs and PCs. Worse yet, in support of this commercial windfall, EIA and its allies have ignored their own standards positions, in other Commission proceedings, that directly contradict their purported policy goal (and the strong public policy interest) of facilitating a rapid transition to digital broadcasting.

## **DISCUSSION**

Echelon is listed on the last page of the EIA comments of July 11, 1996 as one of the "EIA/ATV Committee Participants." Yet, Echelon is not a participant in the EIA ATV Committee and Echelon *does not agree* with EIA's comments. Instead, Echelon believes that mandatory government standards should be assiduously avoided because of the well-documented deleterious effects such standards have upon consumer choice, competition and innovation. We agree with the comments of the National Cable Television Association is this rulemaking:

The very history of advanced television teaches us one powerful lesson: a government-mandated standard, though appealing in a short-term way, is the wrong way to go. One need not look back more that a decade ago, when the momentum of the moment directed the FCC to

<sup>&</sup>lt;sup>3</sup> Comments of the Electronics Industries Association and the EIA Advanced Television Committee (July 11, 1996).

establish an *analog* HDTV standard. Those in favor of government standard-setting would have declared victory with that standard. Today, we recognize that 'standard' for the defeat it would have been. Had the standard been set then, the nation would have been saddled with inferior technology.

Worse, that standard would have been locked into the Code of Federal Regulations, alterable only by protracted government rulemaking. And any amendments would be slowed down even further by incumbents with a vested interest in the status quo standard.

#### NCTA Comments at 3.

Echelon strongly believes in the genius of the marketplace. HDTV will succeed if it addresses the needs of consumers. A mandatory standard is not necessary to remedy any harm to consumers, and imposing a standard now—at the dawn of the digital era—will surely foreclose technical innovations and product developments that cannot even be imagined today. And the ATSC standard itself creates a biased digital marketplace by favoring some technologies (NTSC-compatible consumer electronics manufacturers) over others (computer, software and motion picture companies) on technical elements such as non-square pixel spacing, interlaced versus progressive display formats, and aspect ratio. Any mandatory government standards must be strictly neutral in the emerging competitive battle among these and other industries to become the dominant technology in American living rooms of the 21st century.

Echelon's concerns with respect to EIA's comments, however, go beyond any confusion about our long-held opposition to government mandated standards. We see some interesting contradictions between the positions that EIA and NCTA take here, with respect to ATV, and their recommendations in other standards matters before the Commission. These contradictions illustrate that some participants in FCC proceedings

are all too willing to sacrifice principle and reasoned analysis where a regulatory mandate that would advantage them competitively, and reward them financially, seems within reach.

In its ATV comments in this proceeding, EIA makes an impassioned policy argument that the Commission should ensure that "the transition from today's NTSC environment to tomorrow's world of DTV is as seamless and inexpensive as possible for consumers." EIA Comments at 3. In support of the ATSC standard, EIA suggests that:

the standard will encourage broadcasters to begin investing in DTV equipment and programming, and enable equipment manufacturers to begin developing DTV receivers with a wide variety of capabilities and at an equally wide variety of price points. In this way, adoption of the standard will provide consumers with the *incentive* and ability to *migrate* to DTV.

Id. at 2 (emphasis supplied). Yet, in an other rulemaking, ET Docket No. 93-7, EIA argues for a "Decoder Interface" as the solution for cable equipment compatibility problems. This Decoder Interface will not work with a single existing NTSC receiver. In fact, a consumer must purchase a new NTSC television, VCR and two Decoder Interface modules just to solve the compatibility problems that are the subject of the cable compatibility rulemaking. In EIA's view, this same consumer will then soon afterward be provided—again as a result of a mandatory government standard—with the "incentive and ability to migrate" to DTV.

This "double dip" at forced consumer purchases is quite a windfall for manufacturers of TVs and VCRs, but hardly consistent with each other or with the public interest in a transition to digital television. Indeed, EIA's Decoder Interface proposal would substantially retard conversion to digital broadcasting by creating a financial disincentive for consumer investment in DTV receivers—in order to preserve

the value of recently purchased analog "cable ready" equipment—thus undermining the very policy objective used as support for a mandatory DTV standard.

Similarly, NCTA eloquently argues for reliance upon the market in decrying government mandated standards for ATV, stating unambiguously that "[e]ven where advised by industry representatives, the government should not substitute its judgment for that of the marketplace." NCTA Comments at 5. But like EIA, NCTA also strongly endorses a government mandate in ET Docket No. 93-7, the cable compatibility proceeding, where the proposed standard allows cable operators to avoid investing in new, compatible set-top boxes, instead requiring consumers to spend significantly more money to purchase new televisions and VCRs. Once again, an established industry seeks to use regulation to provide itself with a financial windfall at the expense of consumers through mandatory government standards.

These positions are particularly ironic in contrast to the two industries' opposition to mandatory standards for their own products and services. EIA opposes "all-format" ATV standards for TVs (which would assure consumers of receiving all the digital formats of the ATSC standard), and NCTA opposes a mandated conversion to digital scrambling (which would solve the cable equipment compatibility and retail availability problems associated with cable set-top boxes). On the other hand, in the same time frame in which the proposed ATSC standard is designed to motivate consumers to proceed through two equipment "migrations," initially to the Decoder Interface and thereafter to ATV, the government will have contributed billions of dollars in lost licensing fees and broadcasters will have expended large sums to support

digital transmission. EIA and NCTA are to be applauded for solving the age old paradox of "eating your cake, and having it too."

The same thing does not hold for the Commission, because the positions of these industries on analog television standards undermines what the FCC is trying to accomplish in this proceeding. This unfortunate potential for internal contradictions in Commission policy toward the transition to digital television should be resolved in a coherent fashion before final standards decisions are made. Echelon strongly believes that the FCC should establish a common policy framework governing *all* the rulemakings related to television and cable television standards, including those associated with ATV as well as cable compatibility under Section 301(f) of the 1996 Telecommunications Act<sup>4</sup> and retail availability under Section 304 of the 1996 Act.<sup>5</sup>

We submit the following simple, prioritized objectives:

- Rely upon the marketplace to establish standards. Consumers possess a collective genius for selecting winning products and technologies.
- Facilitate the rapid migration of television services from NTSC to DTV, as the Commission has already done in foregoing licensing fees on this very valuable spectrum.
- Implement standards with respect to analog NTSC equipment very carefully, including those rulemakings associated with cable compatibility and retail availability, so as to work with existing televisions and receivers, thereby avoiding a costly, wasteful double migration for consumers.

We recognize that such a policy framework may be perceived as inconsistent with the management of oligopolies that has too often characterized the Commission's

<sup>&</sup>lt;sup>4</sup> 47 U.S.C. § 544a; see ET Docket No. 93-7.

<sup>&</sup>lt;sup>5</sup> 47 U.S.C. § 629. The Commission expects to release an NPRM on retail availability in November 1996.

regulation of TV manufacturers and the cable industry. Happily, the competitive forces unleashed by the 1996 Telecommunications Act have restored true competition to both of these marketplaces. Trusting the market is preferable to trusting political compromises reached in technically dynamic industries. Yet if the Commission nonetheless chooses to implement a mandatory standard for ATV in light of the unique economic status of free, over-the-air broadcast television, it is *even more* imperative that it not undermine the transition to digital transmission by acting at cross-purposes on standards for analog NTSC equipment. Our nation can only afford to move into the DTV era once, so we have got to "get it right the first time."

## **CONCLUSION**

The Commission should avoid and minimize mandatory ATV standards, ensure competitive neutrality between computer and consumer electronics applications, and avoid taking any action on television standards in related proceedings that would undermine a rapid marketplace migration to DTV broadcasting and equipment. The Commission should reject the EIA and NCTA proposal for a "Decoder Interface"

standard in ET Docket No. 93-7 because it would directly contradict the central public policy objectives of this proceeding.

Respectfully submitted,

Glenn B. Manishin

Blumenfeld & Cohen - Technology Law Group

1615 M Street, N.W., Suite 700

Washington, DC 20036

202.955.6300

202.955.6460 fax

Counsel for Echelon Corporation

Dated: August 12, 1996

#### **CERTIFICATE OF SERVICE**

I, Cynthia Miller, do hereby certify on this 12th day of August, 1996, that I have served a copy of the foregoing document via first class mail, postage prepaid, to the parties below:

Cynthia Miller

\*The Honorable Reed E. Hundt Chairman Federal Communications Commission 1919 M Street, N.W. - Room 814 Washington, DC 20554

\*The Honorable Susan Ness Commissioner Federal Communications Commission 1919 M Street, N.W. - Room 832 Washington, DC 20554

\*Saul Shapiro Federal Communications Commission 1919 M Street, NW Room 310 Washington, DC 20554

\*International Transcription Service 2100 M Street - Room 140 Washington, DC 20037

Daniel L. Brenner Neal M. Goldberg Loretta P. Polk Counsel for NCTA, Inc. 1724 Massachusetts Ave., NW Washington, DC 20036 \*The Honorable Rachel B. Chong Commissioner Federal Communications Commission 1919 M Street, N.W. - Room 844 Washington, DC 20554

\*The Honorable James H. Quello Commissioner Federal Communications Commission 1919 M Street, N.W. - Room 802 Washington, DC 20554

\*Roger Holberg Federal Communications Commission 2000 M Street, NW Room 550 Washington, DC 20554

Peter F. McCloskey President Electronic Industries Association 2500 Wilson Blvd. Arlington, VA 22201

Kevin S. DiLallo
D.E. Boehling
Henry D. Levine
James S. Blaszak
Levine, Blaszak, Block & Boothby
1300 Connecticut Ave., NW
Suite 500
Washington, DC 20036

Robert K. Graves R.K. Graves Associates Technology and Policy Consultants 12701 Mill Glen Court Clifton, VA 20124

\* Indicates delivery via messenger.